BOKSHTEYN, B.S.; BELASHCHENKO, D.K.; ZHUKOVITSKIY, A.A.

Studying surface diffusion in powders by the electrodiffusion potential method. Fiz.tver.tela 4 no.7:1728-1734 Jl '62. (MIRA 16:6)

1. Moskovskiy institut stali.
(Powder metallurgy) (Diffusion)

S/204/63/003/001/012/013
E075/E436

AUTHORS: Zhukhovitskiy, A.A., Turkel'taub, N.M.

TITLE: The chromatographic determination of impurities

PERIODICAL: Neftekhimiya, v.3, no.1, 1963, 135-143

TEXT: The possibility of determining impurities in gas mixtures by ionization detectors and new gas-chromatographic methods was investigated. The dependence of the required number of theoretical plates on the ratio (B) of concentrations of adjacent components was analyzed and the following relationships derived:

$$\frac{N_B}{N_1} = \frac{n^2}{4} \quad ; \quad \text{and for } B \gg 1 \quad \frac{N_B}{N_1} = \frac{\ln B}{2}$$

where N - number of theoretical plates and $n = \sqrt{2 \ln B}$ for $B \gg 1$. Thus for $B = 1000$, the number of theoretical plates in comparison with $B = 1$ should be increased 2.84 times. In general, it is desirable for the main component to be adsorbed more strongly (even irreversibly) than the impurity. This would prevent the latter from being obscured by the tailing of the main component.

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The most promising methods are those developed recently by A.A.Zhukhovitskiy et al and are: 1) thermodynamic method (Dokl. AN SSSR, v.92, 1953, 987), where the mixture is fed continuously into the column subjected to periodic temperature gradient moving in the same direction as the velocity of the furnace; 2) gradient chromatography (Dokl. AN SSSR, v.144, 1962, 829), its advantage being that the diffusional dilution does not lower the concentration of impurities; 3) vacancy chromatography (Dokl. AN SSSR, v.143, 1962, 646), the introduction of the main component into the mixture passed through the column removing its peak (vacancy) in the chromatogram and thus facilitating the determination of the impurity. The methods reveal new possibilities in the analysis of crude oils, natural gas, upper layers of atmosphere and impurities in industrial gaseous mixture. There are 5 figures and 2 tables.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut yadernoy geofiziki i geokhimii (All-Union Scientific Research Institute of Nuclear Geophysics and Geochemistry)

SUBMITTED: May 14, 1962

S/032/63/0[illegible]/004/007/016
A004/A127

AUTHORS: Guglya, V.G., Chiang P'eng-Ch'ei, Bokshteyn, B.S., Zhukovitskiy, A.A.

TITLE: On the practicability of the Müller relation for the reflection of β-particles from synthetic mixtures.

PERIODICAL: Zavodskaya laboratoriya, no. 4, 1963, 449 - 453

TEXT: The detailed investigations carried out by Müller (Anal. Chem., 29, 6, 969, 1957) on reflections from a great number of chemical compounds revealed that this reflection is determined by some mean charge Z. The authors conducted investigations to further elucidate the factors determining the reflection from multicomponent systems. It is shown that the intensity of β-radiation reflection is determined by the mean charge of the chemical compound or mechanical mixture; therefore, an analysis of multicomponent systems as to the content of some or even one of the constituents is impossible under general conditions. Moreover, it was found that the intensity of the reflected radiation depends also on the fractionating composition of the powder. The authors describe their tests in detail, whic..

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were carried out with the powders of pure metals, chemical compounds and synthetic binary and ternary mechanical mixtures. They point out that only for systems of micro-nonhomogeneity it is possible to determine the composition of multicomponent systems using the method described. There are 5 figures and 4 tables.

ASSOCIATION: Moskovskiy institut stali i splavov (Moscow Institute of Steel and Alloys)

BLISTANOV, A.A.; BOKSHTEYN, S.Z.; GUDKOVA, T.I.; ZHUKOVITSKIY, A.A.; KISHKIN, S.T.

Investigating the effect of stress on porosity forming. Issl. po zharoprоch. splav. 10:81-86 '63. (MIRA 17:2)

S/032/63/029/001/001/022
B101/B186

AUTHORS: Zhukhovitskiy, A. A., Turkel'taub, N. M., Gayer, M., Lagashkina, M. N., Malyasova, L. A., and Shlepuzhnikova, G. P.

TITLE: Vacantochromatography

PERIODICAL: Zavodskaya laboratoriya, v, 29, no. 1, 1963, 8 - 13

TEXT: A variant of chromatography is suggested in which the mixture to be separated flows continuously through the column and the carrier gas is added in portions. The rules governing the motion of bands in conventional chromatography apply also to the resulting "vacancies" (places containing no substance to be absorbed). Examples of vacantochromatograms are given for hydrocarbon mixtures where the "vacancies" were produced by addition of 0.6 cm^3 air. The asymmetry of peaks is less when using the suggested method than in the usual adsorption chromatography. The area of the "vacancy" peak is proportional to the volume of the carrier gas added. The sensitivity can be increased by moving a temperature field against the flow. Another variant is the addition of carrier gas with a verifying agent, e.g. butane. The impurity concentration can be calcu-

Vacantochromatography

S/032/63/029/001/001/022
B101/B186

lated from the ratio between the peaks of the gaseous impurities in He and the peak of the butane vacancy. Vacantochromatography is particularly recommended for the analysis of low-boiling impurities. The direct use of a flame ionization detector is possible when analyzing noncombustible substances. There are 7 figures and 2 tables.

ASSOCIATION: Institut yadernoy geofiziki i geokhimii (Institute of Nuclear Geophysics and Geochemistry)

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S/032/63/029/001/002/022
B101/B186

AUTHORS: Zhukhovitskiy, A. A., Turkel'taub, N. M., Kancheyeva, O. A., Naumova, V. V., and Ryabchuk, L. N.

TITLE: Stepwise chromatography

PERIODICAL: Zavodskaya laboratoriya, v. 29, no. 1, 1963, 14 - 18

TEXT: A simplified form of chromatography is suggested for industrial analyses. Horizontal steps are obtained instead of peaks by introducing in the column large amounts of the mixture to be separated. Complete separation of the substances is not necessary as the height of the steps is such that the components and their concentrations can be determined with the same accuracy as on the basis of the peaks in complete separation. The conditions for the formation of steps are derived from the equation for the separation coefficient and from the dependence of the concentration on diffusion, the Henry coefficient, and the Kramp function. A column twice as long as that used in detection chromatography is needed, and the Henry coefficient must be much greater than unity. Complete separation of the steps is not necessary, however, for mixtures

Stepwise chromatography

S/032/63/029/001/002/022
B101/B186

having only 2-3 components. Examples are given for the separation of hydrocarbon mixtures on brick powder impregnated with vaseline oil or hexadecane, or on Al_2O_3. Columns of 300-340 cm length or a capillary of 93 m length wetted with hexadecane were used. There are 5 figures.

ASSOCIATION: Institut yadernoy geofiziki i geokhimii (Institute of Nuclear Geophysics and Geochemistry)

Card 2/2

ZHUKHOVITSKIY, A. A.; GRIGORYAN, V. A.; MIKHALIK, Ye.

Surface effect of a chemical process. Dokl. AN SSSR 155 no. 2:392-394 Mr '64. (MIRA 17:5)

1. Moskovskiy institut stali i splavov. Predstavlena akademikom P. A. Rebinderom.

ACCESSION NR: AP4022722 S/0020/64/155/002/0392/0394

AUTHOR: Zhukhovitskiy, A. A.; Grigoryan, V. A.; Mikhalik, Ye.

TITLE: The surface effect of a chemical process

SOURCE: AN SSSR. Doklady*, v. 155, no. 2, 1964, 392-394

TOPIC TAGS: Thermoelectric phenomena, free energy conversion, thermodiffusion, electrodiffusion potential, temperature gradient, surface energy, phase contact area, surface tension, initial state, final state, nitrogen, capillary, gaseous mixture, interface, irreversible process, thermodynamics.

ABSTRACT: The subject under consideration in this article is the conversion of the free energy of a chemical process to surface energy. A chemical process may increase the phase contact area under certain conditions, i.e. it may affect the magnitude of surface tension. An increase of the interface under conditions of chemical equilibrium may result in an increasing number of moles of the surface-active intermediate compound which, generally speaking, is associated with the disappearance of the molecules in the initial and final states and ratios not in keeping with the equilibrium concentrations and the subsequent transition from one

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ACCESSION NR. AP4022722

state into another. The effect of the capillary activity of the chemical process can be illustrated by four groups of tests. A number of researchers noted that in the chemical process of the interphase transition of components in the metal-slag system, the metal drop found in the slag changes its form. They ascribed that phenomenon to the chemical interphase transition. Another qualitative illustration of the reduction of surface tension (σ) as a result of the simultaneous chemical process is the self-emulsification initiated by the chemical reaction. The surface tension was measured by two methods: the maximum pressure in a bubble and the drop count method. The results were compared and found to be similar. Orig. art. has: 2 figures and 5 formulas.

ASSOCIATION: Moskovskiy institut stali i splavov (The Moscow Institute of Steel and Alloys)

SUBMITTED: 05Nov63 DATE ACQ: 08Apr64 ENCL: 00

SUB CODE: PH, CH NO REF SOV: 002 OTHER: 002

Card 2/2

ZHUKHOVITSKIY, A.A.; TURKEL'TAUB, N.M.; SHVARTSMAN, V.P.; SHLYAKHOV, A.F.; Prinimali uchastiye: NOVIKOVA, L.G.; KORNELYUK, L.G.

Diffusion of frontal zones and the calculation of the composition of mixtures in gas carrier-free chromatography. Dokl. AN SSSR 156 no. 3:654-657 '64. (MIRA 17:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut yadernoy geokhimii i geofiziki. Predstavleno akademikom P.A.Rebinderom.

S/122/61/000/002/010/011
A161/A126

AUTHOR: Zhukhovitskiy, A. F. Engineer

TITLE: Some production and labor organization aspects in comprehensively automated industry

PERIODICAL: Vestnik mashinostroyeniya, no. 2, 1961, 63 - 76

TEXT: The author discusses the organization matters in view of the automation progress in the USSR and the old management ways that are hampering progress in already existing automated shops. It is pointed out that the production planning and accounting is simple in an automated shop, and the old production preparation ways are out of place. The functions are discussed of the shop dispatcher in charge of shift, transfer machine line foremen and setter, etc. down to shop store labor and cleaning teams, and a management plan is suggested. The idea is illustrated by management plans occupying ten pages and showing the organization as it is in nonautomated shops and as it is suggested for the switchover period to automation and for automated production. The technical progress function, or rationalization, would be left to the new functionaries - the line foremen and

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Some production and labor ....

S/122/61/000/002/010/011
A161/A126

setters, or the foremen and setters of forging or other shops. It is emphasized that setters must be specially skilled and ought not be occupied with any additional functions except setting. There are 7 figures.

Card 2/2

ANDREYEV, Georgiy Pavlovich; ANDREYEV, Sergey Nikolayevich; BOGOLYUBOV, Valentin Yevgen'yevich; BURDAK, Nadezhda Mironovna; ZHUKHOVITSKIY, Boris Yakovlevich; ZEVEKE, Georgiy Vasil'yevich; KARAYEV, Ruben Iosifovich; LEVITAN Semen Arkad'yevich; MUKHIN, Aleksandr Andreyevich; NEGNEVITSKIY, Iosif Borisovich; PEREKALIN, Mikhail Aleksandrovich; POLIVANOV, Konstantin Mikhaylovich, prof., doktor tekhn.nauk; FRIDKIN, L.M., tekhn. red.

[Problems of theoretical principles of electrical engineering; theory of networks]Zadachnik po teoreticheskim osnovam elektrotekhnik; teoriia tsepei. [By]G.P.Andreev i dr. Moskva, Gosenergoizdat, 1962. 159 p. (MIRA 15:12)
(Electric engineering) (Electric networks)

BACHURIN, N.I., inzh.; VOLKOV, S.S., inzh.; GORODETSKIY, S.S., prof., doktor tekhn. nauk; GUSEV, S.A., dotsent, kand. tekhn. nauk; ZHUKHOVITSKIY, B.Ya., dots., kand. tekhn. nauk; IVANOV-SMOLENSKIY, A.V., dots., kand. tekhn. nauk; KIFER, I.I., dots., kand. tekhn.nauk; KORYTIN, A.A., starshiy prepodavatel'; KULIKOV, F.V., dots.; NIKULIN, N.V., dots., kand. tekhn. nauk; PODMAR'KOV, A.N., dots.; PRIVEZENTSEV, V.A., prof., doktor tekhn. nauk; RUMSHINSKIY, L.A., dots., kand. fiz.-mat. nauk; SOBOLEV, V.D., dots., kand. tekhn.nauk; URLAPOVA, M.N., inzh.; TIKHOMIROV, P.M., dots., kand. tekhn. nauk; FEDOROV, A.A., dots., kand. tekhn. nauk; CHUNIKHIN, A.A., dots., kand. tekhn. nauk; CHILIKIN, M.G., prof., glav. red.; GOLOVAN, A.T., prof., red.; GRUDINSKIY, P.G., prof., red.; PETROV, G.N., prof., doktor tekhn. nauk, red.; FEDOSEYEV, A.M., prof., red.; ANTIK, I.V., inzh., red.; BORUNOV, N.I., tekhn. red.

[Electrical engineering handbook]Elektrotekhnicheskii spravochnik. 3., perer. i dop. izd. Pod obshchei red. A.T. Golovana i dr. Moskva, Gosenergoizdat. Vol.1. 1962. 732 p. (MIRA 15:10)

1. Moskovskiy energeticheskiy institut (for Golovan, Grudinskiy, Petrov, Fedoseyev, Chilikin, Antik).

(Electric engineering--Handbooks, manuals, etc.)

IL'IN, Anatoliy Afanas'yevich; ZHUKHOVITSKIY, B.Ya., red.; LARIONOV, G.Ye., tekhn. red.

[Bifurcated electric power distribution networks as remote control communication channels] Razvetvlennye silovye seti kak kanaly sviazi dlia telemekhaniki. Moskva, Gos. energ. izd-vo, 1961. 103 p. (Biblioteka po avtomatike, no.38) (MIRA 14:11)
(Electric power distribution) (Remote control)

NETUSHIL, Anatoliy Vladimirovich; ZHUKHOVITSKIY, Boris Yakovlevich; KUDIN, Vsevolod Nikolayevich; BABAT, G.I., prof., retsenzent; OVSYANNIKOVA, Z.G., red.; GARKINA, T.D., tekhn. red.

[High-frequency heating in an electric field] Vysokochastotnyi nagrev v elektricheskom pole. Moskva, Gos. izd-vo "Vysshaia shkola," 1961. 145 p. (MIRA 14:10)

(Dielectric heating)

ZHUKOVITSKIY, I.M. (Belgorod)

Melanomas. Fel'd. i akush. 25 no.8:8-11 Ag '60. (MIRA 13:8)
(MELANOMA)

ZHUKOVITSKIY, I.M. (Belgorod)

Lung cancer and smoking. Fel'd. i akush. 22 no.3:46-48 '57
(MLRA 10:5)

(LUNGS--CANCER) (TOBACCO--PHYSIOLOGICAL EFFECT)

ZHUKOVITSKIY, I.M. (Belgorod)

Stomach cancer and its prophylaxis. Med.sestra 18 no.6:16-20 Je '59. (MIRA 12:8)

(STOMACH--CANCER)

ZHUKOVITSKIY, I.M. (Belgorod)

Echinococcosis of the kidney. Klin. med. 41 no.6:141-143 Je '63. (MIRA 17:1)

1. Iz khirurgicheskogo otdeleniya Belgorodskoy oblastnoy bol'nitsy (zav. A.F. Petrov).

ZHUKOVITSKIY, I. M. (Belgorod)

Errors in the diagnosis of alcoholic intoxication. Klin. med. 40 no.7:100-103 Jl '62. (MIRA 15:7)

(ALCOHOLISM)

ZHUKOVITSKIY, Ivan Mikhaylovich; ORLOVSKIY, L.V., red.; KALINICHEV, V.A., tekhn.red.

[Prevention of pulmonary cancer] Profilaktika raka legkikh. Moskva, Gos.izd-vo med.lit-ry Medgiz, 1960. 12 p. (MIRA 14:5)

(LUNGS--CANCER)

ZHUKOVITSKIY, L.M. (Belgorod)

Hemoblastoses. Fel'd. i akush. 24 no.3:3-9 Mr '59. (MIRA 12:4)

(HEMOPOIETIC SYSTEM--DISEASES)

ZHUKHOVITSKIY, S.Yu.; AGABAL'YANTS, E.G.

Mechanics of lime processing of clay muds. Trudy KF VNII no.9:32-37 '62. (MIRA 15:9)
(Oil well drilling fluids)

ZHUKHOVITSKIY, S.Yu.; RYABCHENKO, V.I.

Relationship among the conditional viscosity, static shearing stress, and hydraulic constants of clay muds. Trudy KF VNII no.9:38-49 '62. (MIRA 15:9)
(Oil well drilling fluids)

ZHUKOVITSKIY, V.I., gornyy inzhener

Electric conveyer scales. Vop. rud. transp. no.3:108-128 1959.
(MIRA 14:4)

1. Dnepropetrovskiy gornyy institut.
(Scales (Weighing instruments))
(Conveying machinery)

9 (2), 28 (2) SOV/115-59-10-7/29

AUTHOR: Zhukovitskiy, V.I.

TITLE: Automatic Compensation of Electro-Extensometric Balances

PERIODICAL: Izmeritel'naya tekhnika, 1959, Nr 10, pp 16-18 (USSR)

ABSTRACT: An automatic compensator without the slide-contact rheochord was constructed by the author for electro-extensometric balances. The wire changers, which form the resistance of the arms of a compensating bridge, are mounted on a small steel rod (Fig 1) of equal resistance to bending. The free end of the rod is displaced by a servo-mechanism. When the rod is bent, the resistance of the bridge arm varies. The author gives an analytical and graphic computation of the process. There are 2 diagrams and 2 graphs and 1 table.

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ZHUKOVITSKIY, V.I., inzh.

Electronic conveyor scales with a servodrive. Vop. rud. transp. no.6:49-56 '62. (MIRA 15:8)

1. Dnepropetrovskiy gornyy institut.
(Conveying machinery--Electronic equipment)

RENGEVICH, A.A., kand.tekhn.nauk; ZHUKOVITSKIY, V.I., gornyy inzhener

Unipolar generators with permanent magnets. Vop. rud. transp. no.3:287-304 1959. (MIRA 14:4)

1. Dnepropetrovskiy gornyy institut.
(Electric generators)

ZHUKOVITSKIY, V.I., inzh.

Weight gauge for electronic conveyor scales. Vop. rud. transp. no.4:191-199 '60. (MIRA 14:3)

1. Dnepropetrovskiy gornyy institut im. Artema.
(Conveying machinery—Attachments)
(Scales (Weighing instruments))

18.3100

77727
SOV/149-60-1-16/27

AUTHOR: Zhukovetskiy, V. V.

TITLE: Magnesium Vapor Pressure in a MgO-Si System

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Tsvetnaya metallurgiya, 1960, Nr 1, pp 115-118 (USSR)

ABSTRACT: A reaction between magnesium oxide and silicon in vacuum at high temperature forms metallic magnesium and a solid slag which consists of $2MgO \cdot SiO_2$. Magnesium vapor pressure was determined by several authors but their results differed greatly. The author verified these data using the method of small orifice through which vapors escape and their pressure can be determined according to the equation:

$$P = k \frac{q}{fs} \sqrt{\frac{2\pi RT}{Mi}}, \qquad (2)$$

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where P is the pressure under which vapor escapes, dyn/cm^2; q is magnesium quantity escaped through orifice, g; t is duration of heating at test temperature, sec; s is orifice area, cm^2; R is gas constant, erg/degree; T is absolute test temperature; M is molecular weight of magnesium vapor; K is corrective coefficient determined from a known vapor pressure, in this case Ag. This method was described in detail in a previous work by the author (Trudy SKGMI, Vol 15, 1957). S. Tararin, V. Zagryadskiy, and A. Iosifova participated in the present work. The materials used in the tests consisted of strongly calcined magnesite (in %, 91.22 MgO, 0.65 CaO, 3.46 Fe_2O_3, 2.57 SiO_2, and 1.95 other matter) and technical grade silicon from Ural Aluminum Plant (Ural'skiy alyuminiyevyy zavod). The experimental device consisted of the furnace, retort, and reaction vessel as shown in Fig. 1 and 2. Magnesite and silicon were pulverized, screened, briquetted, and charged into the crucible. Vapor pressure was determined at 1,423 and

Magnesium Vapor Pressure in a MgO-Si System

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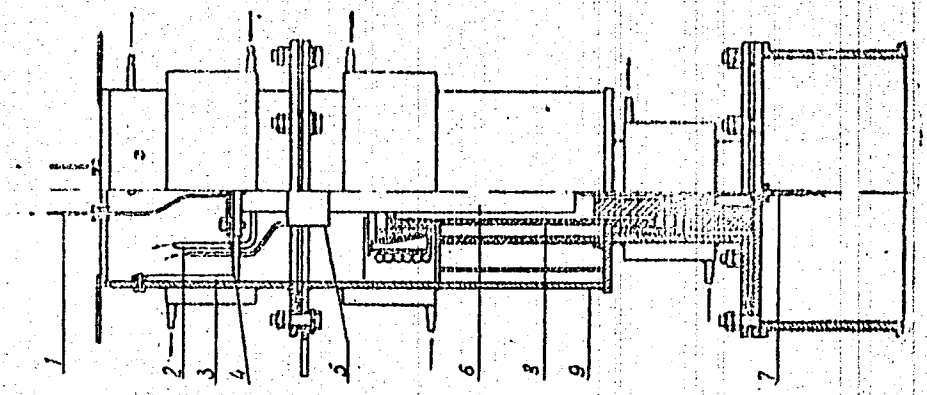

Fig. 1. Vacuum furnace: (1) condenser cooling pipe; (2) vacuum connecting pipe of retort; (3) its bracket; (4) its lid; (5) its cooling jacket; (6) retort; (7) thermocouple; (8) heater; (9) furnace.

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Magnesium Vapor Pressure in a MgO-Si System

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SOV/149-60-1-16/27

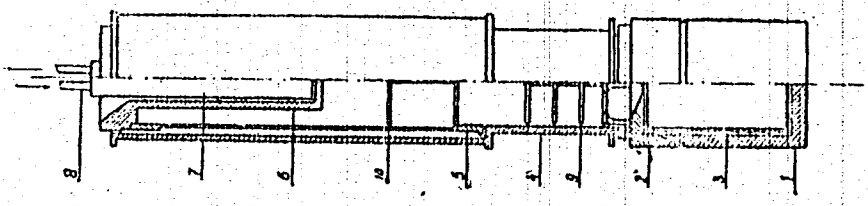

Fig. 2. Reactor apparatus: (1) crucible; (2) its lid; (3) insert; (4) outside pipe; (5) vertical shield; (6) condenser; (7) its cooler; (8) water feeding tube to the latter; (9) lower horizontal shields; (10) upper horizontal shields.

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Magnesium Vapor Pressure in a MgO-Si System

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SOV/149-60-1-16/27

1,473° C. Magnesium condensate was collected after a certain recorded time, dissolved in acetic acid, and its quantity determined. Equation (2) was used, into which a corrective coefficient K = 1.48, as determined from previous tests (with Ag), was introduced. After substitution of test figures Eq. (2) can be written as:

$$P \text{ mm Hg} = 0.11 \, q \sqrt{T} \qquad (3)$$

According to this equation the vapor pressure was calculated and found: 0.27 mm Hg at 1423° K and 0.40 mm at 1473° K. These data are near to those of V. G. Zhivov (1.82 mm at 1,200° C) but differ widely from those of Pidgeon and King (34.2 mm at the same temperature). The latter are evidently incorrect. There are 2 figures; 1 table; and 3 references. 2 Soviet, 1 U.S. The U.S. reference is: Pidgeon, King, Phys. Chemistry Pross. Metall, 1948.

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Magnesium Vapor Pressure in a MgO-Si System

77727
SOV/149-60-1-16/27

ASSOCIATION: North Caucasian Mining Metallurgical Institute. Chair of Metallurgy of Light Metals (Severokavkazskiy gorno-metallurgicheskiy institut. Kafedra metallurgii legkikh metallov)

SUBMITTED: June 3, 1959

Card 6/6

GERSHUNI, G.Z. (Perm'); ZHUKOVITSKIY, Ye.M. (Perm')

Equilibrium stability of a liquid in a horizontal cylinder heated from below. Prikl. mat. i mekh. 25 no.6:1035-1040 N-D '61. (MIRA 14:12)

(Thermodynamics)

GERSHUNI, G.Z.; ZHUKHOVITSKIY, Ye.M.

Heat transfer through a vertical slit with a rectangular cross section in the case of strong convection. Inzh.-fiz. zhur. no.12:63-67 D '60. (MIRA 14:3)

1. Gosudarstvennyy universitet i Gosudarstvennyy pedagogicheskiy institut.

(Heat--Convection)

S/040/63/027/002/008/019
D251/D308

AUTHORS: Gershuni, G. Z. and Zhukovitskiy, Ye. M. (Perm')

TITLE: On the convective instability of a two-component mixture in a gravitational field

PERIODICAL: Prikladnaya matematika i mekhanika, v. 27, no. 2, 1963, 301-308

TEXT: The authors investigate the problem stated, which so far has been largely ignored by theoretical and practical research workers. The problem of the stability of the convection of a two-dimensional vertical layer of the mixture heated from below is solved exactly on the basis of the convective equations of I. G. Shaposhnikov (PMM, v. 17, no. 5, 1953). The possibility of a state of equilibrium is demonstrated, and it is shown that, for equilibrium, the density gradient will be constant and vertical. In contra-distinction from the case of a pure medium, investigated by V. S. Sorokin (PMM, v. 17, no. 1, 1953) there are two possible types of disturbance of the equilibrium position which may arise -

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i.e. monotonic and oscillatory disturbances. Equations are deduced, in terms of the ordinary and diffusional Rayleigh numbers, for the 'neutral' line and the 'neutral' oscillation respectively, (i.e. the line or oscillation which separates those disturbances which are damped from those which increase monotonically in the second case). It has so far been assumed that the equilibrium gradients of temperature and concentration are independent. In conclusion, the authors investigate the stability of equilibrium when these gradients are connected by some law. It is shown that for normal thermodiffusion only unstable relatively monotonic disturbances are possible, while for anomalous thermodiffusion oscillatory instability is possible, and also monotonic instability with heating from above. There are 3 figures.

SUBMITTED: November 28, 1962

L 41660-65 EWP(m)/EWT(1)/FCS(k)/EWA(d)/EWA(1) Pd-1

ACCESSION NR: AP5006257 S/0040/65/029/001/0080/0098

[illegible] [illegible], R. V. (Perm); [illegible] G. Z. (Perm); Zhukhovitskiy, Ye. M. (Perm)

[illegible]

[illegible] Prikladnaya matematika i mekhanika, v. 29, no. 1, [illegible]

[illegible] aerodynamics

[illegible] The behavior of disturbances in two-dimensional [illegible] steady-state

L 41660-65

ACCESSION NR: AP5006257

at rest ($R = 0$) the perturbations are damped monotonically (i.e. all the decrements are real and positive). For nonzero P, the [illegible] oscillate

ZHUKOVSKAYA, Alena [Zhukouskaia, A.]

I look ahead with confidence. Rab. i sial. 36 no.3:16 Mr '60.
(MIRA 13:10)
(Bereza District--Dairying)

ZHUKOVSKAYA, A.F. (Moskva)

Expand the business cooperation of industry and trade workers. Shvein.prom. no.4:38-40 Jl-Ag '63. (MIRA 16:9)

ZHUKOVSKAYA, A.S.

Use of ethanol in the isolation of sodium-22 from cyclotron targets.
Radiokhimiia 7 no.1:125-126 '65. (MIRA 18:6)

24(7)
AUTHORS: Zhukovskaya, D. M., Ioffe, Yu. K.

SOV/48-23-5-2/31

TITLE: Determination of the Attenuation Coefficient of Soft X-rays in Beryllium (Issledovaniye koeffitsiyenta oslableniya myagkikh rentgenovykh luchey v berillii)

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1959, Vol 23, Nr 5, pp 541 - 544 (USSR)

ABSTRACT: Beryllium has been recently employed as a material for the window of X-ray tubes with accelerating voltages up to 60 kv, as are required for therapy, for material investigations and similar purposes. Table 1 contains a comparison between the attenuation coefficients μ/ρ given by seven papers written by other scientists and those determined by the authors. The wavelength range in which measurements were made, is from 2.3 Å to 0.7 Å. In table 2 the determination results of the transmission I/I_0 (in %) of $K_\alpha Cr$, $K_\alpha Fe$, $K_\alpha Cu$ and $K_\alpha Mo$ radiation are again compared in the abovementioned wavelength range and at beryllium layer thicknesses of from 0.3 to 0.9 mm with those contained in the other seven papers. A scheme of the

Card 1/3

experimental arrangement is shown (Fig 1), the primary elements of which are a monocrystal spectrometer, a scintillation counter and a Geiger counter. After a closer description of the system, an interpretation is given of measuring results. The formula is first supplied, by which the μ/ϱ was determined at an accelerating voltage of 8 kv up to 25 kv with 2 ma. The background caused by the dispersion of the X-ray is stated as being $< 1\%$. Table 3 supplies the results obtained by the authors with the Geiger and scintillation counter, and the respective mean values are specified. Table 4 contains the values of μ/ϱ computed with the abovementioned formula for the various wavelengths, and their error is also given. A diagram represents the dependence of I/I_{sp} and μ/ϱ on the wavelength in beryllium. A description follows of results obtained from similar investigations on aluminum; they are summarized in two tables. The result obtained from the comparison between the Russian industrially-produced vacuum-tight beryllium plates and the beryllium window of an American X-ray tube for structural investigations of the Firm Machlett is

regarded as an essential result yielded by these investigations, revealing the μ/ϱ of the American tube to be larger by 2 to 2 1/2 times than that of the Russian type. Finally, the authors thank G. M. Nikolayenko, M. M. Umanskiy and Ye. M. Fridman for assistance and advice given.There are 2 figures, 6 tables, and 10 references, 5 of which are Soviet.

ASSOCIATION: Goszavod Upravleniya radiotekhnicheskoy promyshlennosti Leningradskogo sovnarkhoza (State Factory of the Radiotechnical Industry Administration of the Leningrad Council of National Economy)

ACC NR: AP7008665 SOURCE CODE: UR/0153/66/009/006/0869/0872

AUTHOR: Knyazeva, R. N.; Chernova, G. N.; Zhukovskaya, G. B.

ORG: Inorganic Chemistry Department, Ural State University im. A. M. Gor'kiy (Kafedra neorganicheskoy khimii, Ural'skiy gosudarstvennyy universitet)

TITLE: Separation of selenium from tellurium based on different solubilities of magnesium salts of selenic and telluric acids

SOURCE: IVUZ. Khimiya i khimicheskaya tekhnologiya, v. 9, no. 6, 1966, 869-872

TOPIC TAGS: selenium, tellurium, magnesium compound, selenic acid, solubility

ABSTRACT: A technique is proposed for separating selenium from tellurium, based on the different solubilities of magnesium selenate and orthotellurate, both of which are formed by roasting selenium and tellurium in air with magnesium oxide or Eschka's reagent. The solubility of the orthotellurate Mg_3TeO_6 was determined at several temperatures. It is shown that if Se and Te are roasted with a 20 to 30-fold excess of Eschka's reagent for 40 min at 800°C, a water-soluble selenate is formed together with an almost insoluble magnesium orthotellurate. The sinter is leached out with water and filtered. The filtrate contains the selenium, and the insoluble residue contains the tellurium. The following elements do not interfere with the separation: iron, copper, lead, silver, zinc, antimony, bismuth, chromium, aluminum, silicon, barium, calcium, sulfur, i. e., all the elements usually found in various

Card 1/2 UDC: 541.18.043.045 : 546.23 + 546.24

ACC NR: AP7008665

materials enriched with selenium and tellurium. Orig. art. has: 3 tables.

SUB CODE: 07/ SUBM DATE: 25Jan65/ ORIG REF: 006/ OTH REF: 001

Card 2/2

ZHUKOVSKAYA, I. YA.

FDD PA 169T27

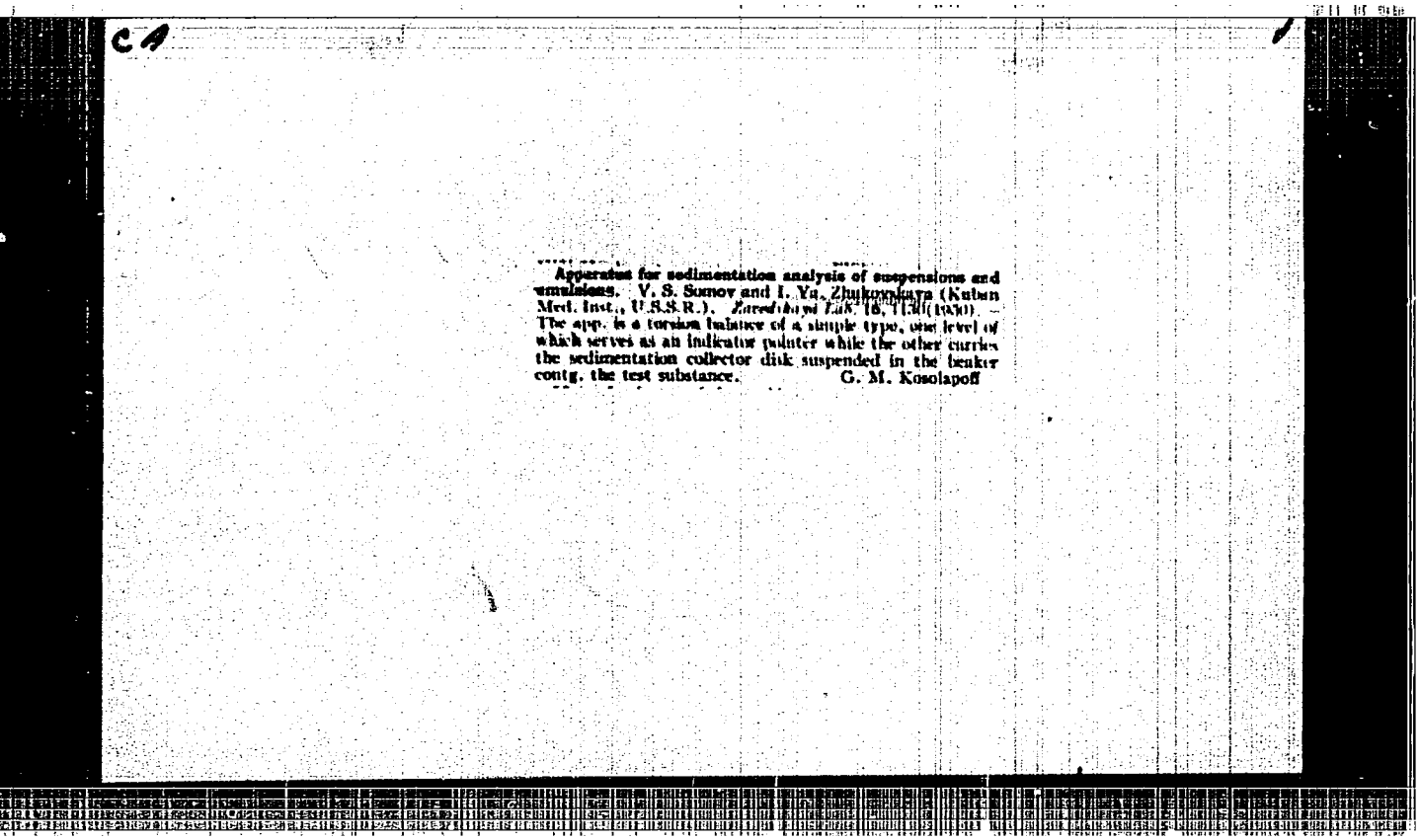
USSR/Chemistry - Analysis

"Instrument for Sedimentation Analysis of Suspensions and Emulsions," V. S. Somov, I. Ya. Zhukovskaya, Kuban Med Inst.

"Zavod Lab" Vol XVI, No 9, pp 1130.

Authors instrument is based on principle of torsional balance using steel wire. Repeated analysis at different temperatures gives sedimentation curve with correspondingly modified scale of ordinates.

PA 169T27



Apparatus for sedimentation analysis of suspensions and emulsions. V. S. Sunov and I. Ya. Zhukovskaya (Kuban Med. Inst., U.S.S.R.). *Zavodskaya Lab.* 16, 1130 (1950). — The app. is a torsion balance of a simple type, one level of which serves as an indicator pointer while the other carries the sedimentation collector disk suspended in the beaker contg. the test substance. G. M. Kosolapoff

MARCEVSKIS, M.; ZHUKOVS, L., red.; PAEGLIS, J., tekhn. red.

[Exhibition of construction in the Latvian S.S.R., 1960] Latvijas PSR 1960, gada celtniecibas izstade. Riga, Tekhniskas informacijas centralais birojs, 1960. 8 p. [In Latvian] (MIRA 14:12)
(Riga—Exhibitions) (Latvia—Construction industry)

OKONOV, Z.V.; ZANDERSONS, J.; KALNINS, A.; ZHUKOVS, L., red.; PAEGLIS, J., tekhn. red.

[Automatic machine for manufacturing staples. Increasing the extraction of resin by utilizing the wood around injured areas of tapped pines] Automats skavu izgatavosanai. Sveku ieguves paplasinasanai var izmantot ari atsvekotu priezu brucu koksnes svekus by J.Zandersons, A.Kalnins. Riga, Tehniskas informacijas centrlais birojs, 1960. 11 p. [In Latvian translated from the Russian] (MIRA 14:12)
(Staples and stapling machines) (Turpentining)

L 36240-66 EWT(m)/EWP(t)/ETI IJP(c) JD/JG

ACC NR: AP6005419 (N) SOURCE CODE: UR/0289/65/000/003/0028/0032

AUTHOR: Rudenko, N. P.; Zhukovskaya, A. S.

ORG: Scientific Research Institute of Nuclear Physics, Moscow State University (Nauchno-issledovatel'skiy institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta); Electrophysical Laboratory, Ural Polytechnic Institute im. S. M. Kirov (Elektro-fizicheskaya laboratoriya Ural'skogo politekhnicheskogo instituta)

TITLE: Use of nonaqueous solvents for separating radioisotopes by precipitation and leaching

SOURCE: AN SSSR. Sibirskoye otdeleniye. Izvestiya. Seriya khimicheskikh nauk, no. 3, 1965, 28-32

TOPIC TAGS: adsorption, beryllium, lithium, sodium, magnesium, radioisotope, chemical precipitation

ABSTRACT: A method was developed for separating the radioisotopes sodium-22 and beryllium-7 without a carrier by precipitating the target element (magnesium in the case

Card 1/2 UDC: 541.15+542.6.621.039.554

L 36240-66

ACC NR: AP6005419

of Na^{22} and lithium in the case of Be^{7}) in a mixed aqueous-organic solvent. The conditions of maximum precipitation of the target element with a minimum occlusion of the radioisotope were determined. The adsorption of the microcomponent (radioisotope) by the precipitate of the macrocomponent was studied in aqueous-organic media (water-acetone, water-ethanol, water-dioxane). The best medium for a maximum extraction of sodium were found to be 10—15% mixtures of acetone or dioxane with water. In the beryllium-lithium system, only ethanol was employed as the organic solvent. An experimental study of the adsorption of beryllium by the lithium sulfate precipitate showed that up to a Be concentration of ~5 x 10^{-5} g-ion/ml, the adsorption isotherm is linear and obeys Henry's law. However, the character of the occlusion of the microcomponent by the precipitate cannot be judged on the basis of this isotherm; and no definite results were obtained for the adsorption mechanism. Orig. art. has: 7 figures.

SUB CODE: 07 / SUBM DATE: none / ORIG REF: 013 / OTH REF: 003

Card 2/2 llb

L 34085-66 EWT(m)

ACC NR: AP6025487 SOURCE CODE: UR/0186/66/008/001/0063/0066

AUTHOR: Rudenko, N. P.; Zhukovskaya, A. S.

52
B

ORG: none

19

TITLE: Use of nonaqueous solvents for isolation of radioactive Na sup 22 from irradiated magnesium

SOURCE: Radiokhimiya, v. 8, no. 1, 1966, 63-66

TOPIC TAGS: sodium, magnesium, stoichiometric mixture, radiation chemistry, chemical separation, chemical precipitation, organic solvent, solubility, desorption

ABSTRACT: A method is proposed for recovering Na^{22} without using a carrier. Irradiated magnesium was dissolved in almost a stoichiometric amount of sulfuric acid. The solution was evaporated until a film began to form and an equal or somewhat larger volume of ethanol was added. The solution was carefully stirred and the liquid with the crystalline precipitate of magnesium sulfate was decanted onto a glass filter. For more complete isolation of Na^{22}, the precipitate was washed five to six times with small portions of ethanol. The extent of Na^{22} recovery was 95-97%. Separation of sodium from small amounts of magnesium passing into the water-ethanol solution was achieved by ion-exchange on the KU-2 cation exchange resin directly from the water-alcohol

Card 1/2

UDC: 541.123.33:546.33.02:546.46

C916 0X65

L 34085-66

ACC NR: AP6025487

filtrate. An 0.1 N HCl solution was used in eluting the Na^{22}. In the present report, the authors examine the possibility of using organic solvents other than ethanol, e.g. acetone and dioxane. It was shown that the nature of the organic solvent added to precipitate magnesium sulfate does not affect the composition of the crystal hydrate formed. The solubility of magnesium sulfate in ethanol, acetone, and dioxane, and in their mixtures with water at 20°C was determined. The desorption of Na^{22} from the surface of crystalline magnesium sulfate by these solvents was studied. It was established that solutions of acetone and dioxane containing 10 - 20% water exceed ethanol in desorptive capacity and are preferred for recovering radioactive Na^{22} from a magnesium target. Orig. art. has: 3 tables. [JPRS: 35,728]

SUB CODE: 07 / SUBM DATE: 26Jan65 / ORIG REF: 003 / OTH REF: 006

Card 2/2

L 39894-66 EWT(1)/EWA(h)/FCC GW/GD-2

ACC NR: AP6018096 SOURCE CODE: UR/0203/65/006/002/0197/0204

AUTHOR: Zhulin, I. A. 11 B

ORG: Institute of Terrestrial Magnetism, Ionosphere and Radio Wave Propagation, AN SSSR (Institut zemnogo magnetizma, ionosfery i rasprostraniya radiovoln AN SSSR)

TITLE: Some problems of the geoeffect of solar corpuscular streams 12

SOURCE: Geomagnetizm i aeronomiya, v. 6, no. 2, 1966, 197-204

TOPIC TAGS: solar corpuscular radiation, magnetohydrodynamics, geomagnetic disturbance, geomagnetic field, shock wave, solar plasma

ABSTRACT: The magnetic field of solar corpuscular streams plays the role of an intermediary in the interaction of streams with the earth's magnetosphere, leading to an increase of the effective cross section of interaction determining the possibility of the injection of solar plasma into the earth's magnetosphere, changing the degree of the frictional effect during the interaction, etc. Among the problems discussed in this paper are the conservation of the magnetic flux, the impossibility of penetration of the field of the flux into the earth's magnetosphere and the associated need for a magnetohydrodynamic interpretation of the theory of geomagnetic disturbances. No solution is found to the most important problem -- the mechanism of magnetospheric energy transfer, but it is believed that several mechanisms are in-

Card 1/2

L 39894-66

ACC NR: AP6018096

volved at the same time: 1) as a result of turbulence at the boundary small blobs of plasma can enter the magnetosphere and be trapped by the geomagnetic field; the field in the blobs, taking their smallness into account, should rapidly attenuate; 2) magnetohydrodynamic waves forming at the boundary of the magnetosphere can become shock waves upon penetration into the magnetosphere with corresponding energy dissipation and heating of the plasma of the magnetosphere; 3) in the transition region between the magnetopause and the standing shock wave there is a turbulent region which can be considered an isotropic group of sonic waves. Taking into account the relative motion of plasma in this region and in the outer part of the magnetosphere it is possible to explain transfer within the magnetosphere to 10^{19} ergs/sec as a result of wave refraction at the boundary of the magnetosphere, apparently adequate to explain storm energy; 4) the mechanism of nonlinear interaction of electrons and possible ionic sonic waves in the unstable transition region of interaction of the solar wind with the earth's magnetosphere. Orig. art. has: 1 figure, 1 table and 10 formulas. [JPRS]

SUB CODE: 03, 04, 08 / SUBM DATE: 21Jan65 / ORIG REF: 012/ OTH REF: 022

Card 2/2

OPOCHINSKAYA, Ye.A. Prinimala uchastiye ZHUKOVSKAYA, K.V.; LAZUKOV, G.I., red.

[Basic characteristics of the development of nature on the territory of the U.S.S.R. in the Quaternary (glacial epoch)] Osnovnye zakonomernosti razvitiia prirody territorii SSSR v chetvertichnom periode (lednikovom periode-antropogene) Pod red.G.I.Lazukova. Moskva, Mosk. gos.univ. im. M.V.Lomonosova. Pt.2. [Bibliography, 1940-1960] Bibliografiia, 1940-1960 gg. No.1. 196?. 251 p. (MIRA 16:11)

(Bibliography--Glacial epoch)

ZHUKOVSKAYA, L.K.; CHERNYSHEVA, N.G.

Standard measure of the intensity of weak magnetic fields.
Trudy inst. Kom. stand., mer i izm. prib. no.43:11-20 '60.
(MIRA 14:7)

(Magnetic measurements)

S/194/61/000/011/003/070
D256/D302

AUTHORS: Zhukovskaya, L.K. and Chernysheva, N.G.

TITLE: Standard of weak magnetic fields

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 11, 1961, 5, abstract 11 A33 (Tr. in-tov Kom-ta standartov, mer i izmerit. priborov pri Sov. Min. SSSR, 1960, no. 43 (103), 11-20)

TEXT: A calculation and description are presented of an arrangement devised as a standard for testing and graduating instruments for measuring strengths of weak magnetic fields. The arrangement consists of a Helmholtz coil system with a provision for compensation of the earth magnetic field and its variations. For compensation of the variations a system was employed with a strong negative feedback and variometers to indicate the vertical and horizontal components of the earth's field. The current in the coils was measured by a compensation method. The estimated error is 0.02 and

Card 1/2

Standard of weak magnetic fields

S/194/61/000/011/003/070
D256/D302

and 1.5% for a standard field 1.0 and 0.003 Oe respectively. 6 references. [Abstracter's note: Complete translation]

Card 2/2

ZHUKOVSKAYA, L.K.; FEDOREYEVA, A.V. (Leningrad)

Distribution of trace elements in vegetable products of nutritional importance [with summary in English]. Vop.pit. 16 no.3:43-47 My-Je '57. (MIRA 10:10)

1. Iz kafedry fiziki (zav. - doktor tekhnicheskikh nauk M.F.Romanova) i kafedry gigiyeny (zav. - doktor meditsinskikh nauk P.N.Lastochkin [deceased]) Pediatricheskogo meditsinskogo instituta, Leningrad
(VEGETABLES,
trace elements in (Rus))
(TRACE ELEMENTS, determination,
in vegetables (Rus))

DRICHKO, A.F.; ZHUKOVSKAYA, L.P.; KARAVAYEV, F.M.; RUSINOVA, S.A.

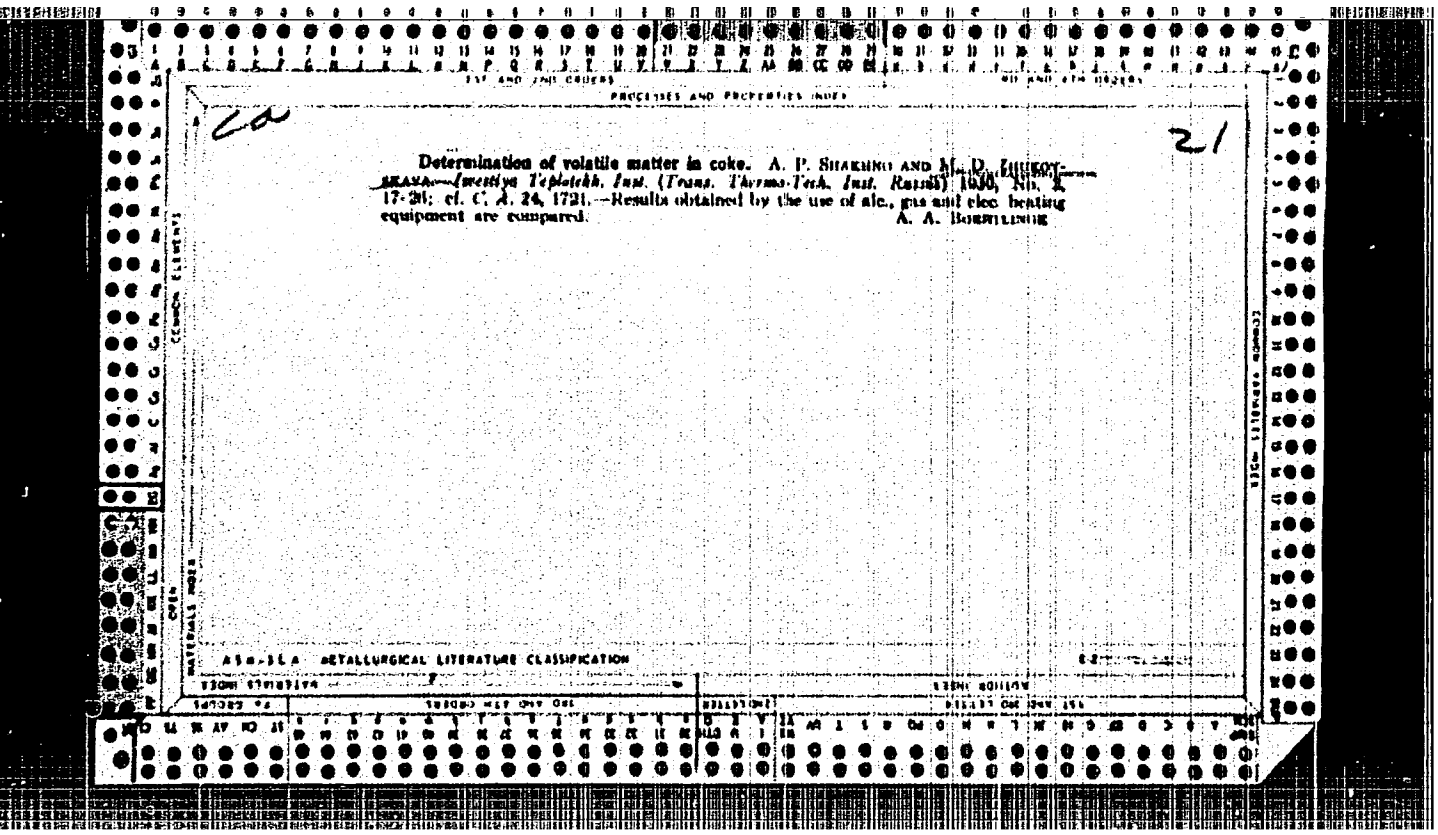
A unit of the UPGI-1 type. Nov. nauch.-issl. rab. po metr. VNIIM no.2:13-18 '64. (MIRA 18:4)

DRICHKO, A.F.; ZHUKOVSKAYA, L.P.; KARAVAYEV, F.M.; RUSINOVA, S.A.

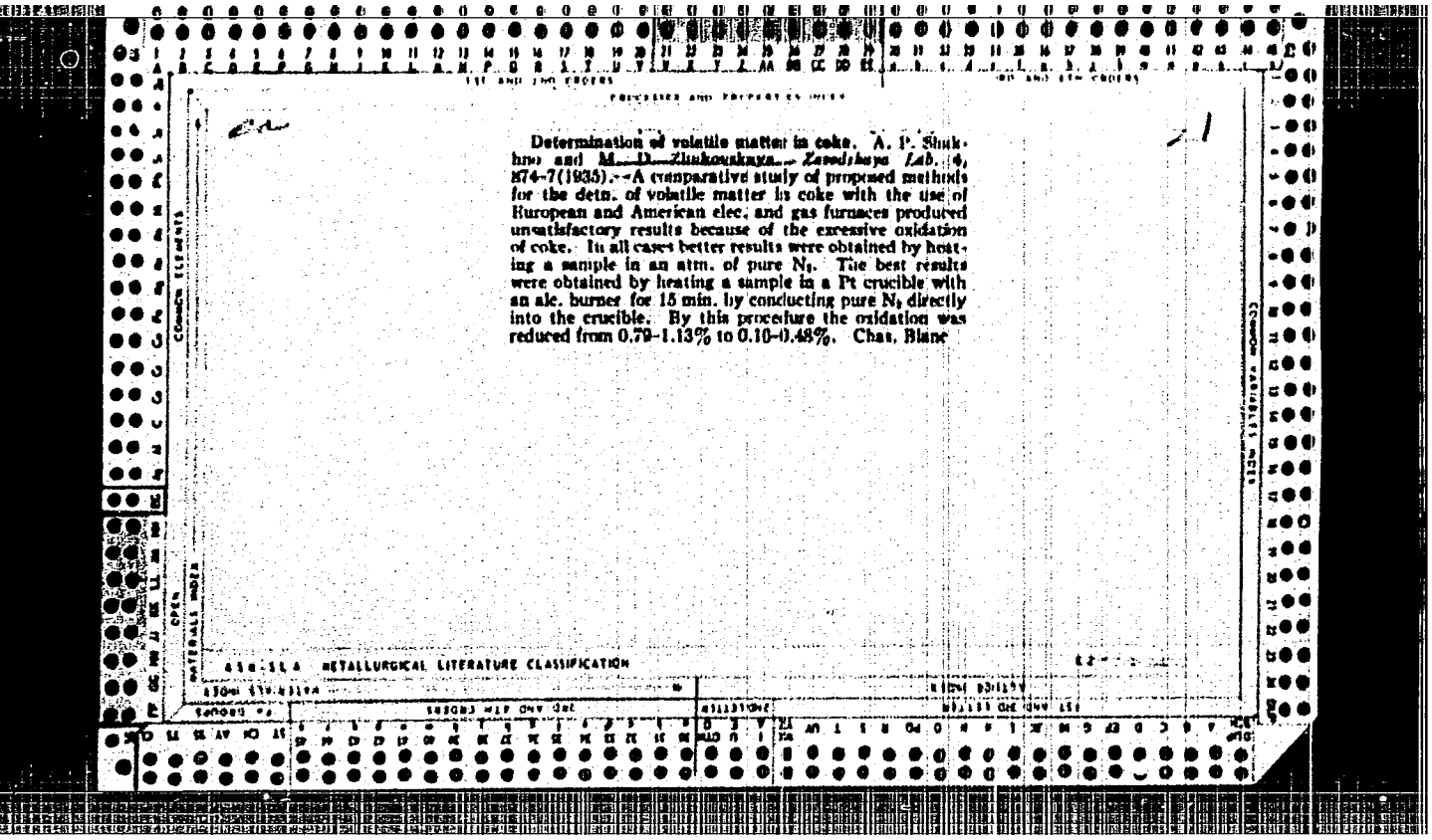
New working standards for radium. Trudy inst.Kom. stand., mer i izm. prib. no.55:81-89 '61. (MIRA 16:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii imeni Mendeleyeva.

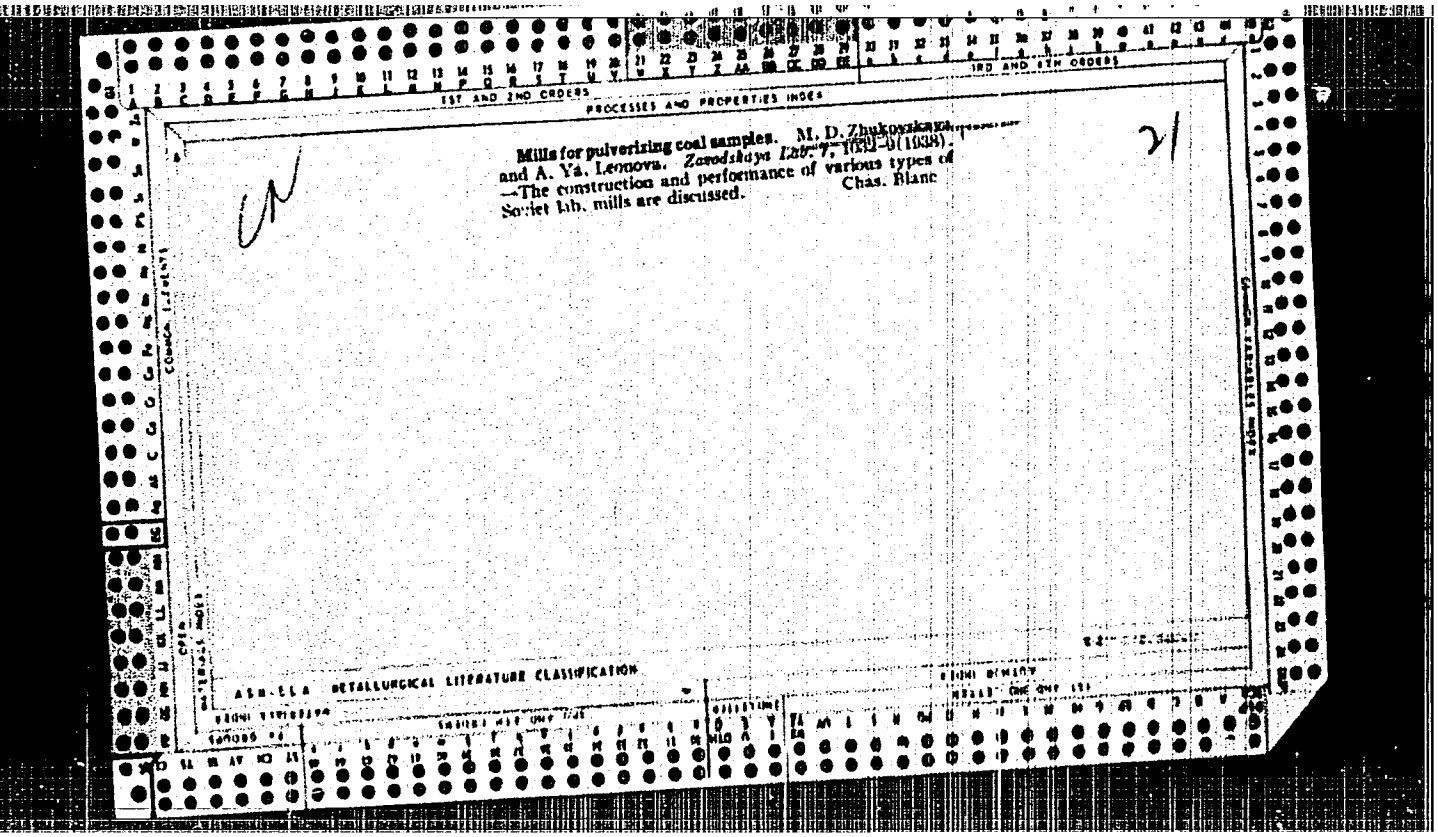
(Radium--Standards)

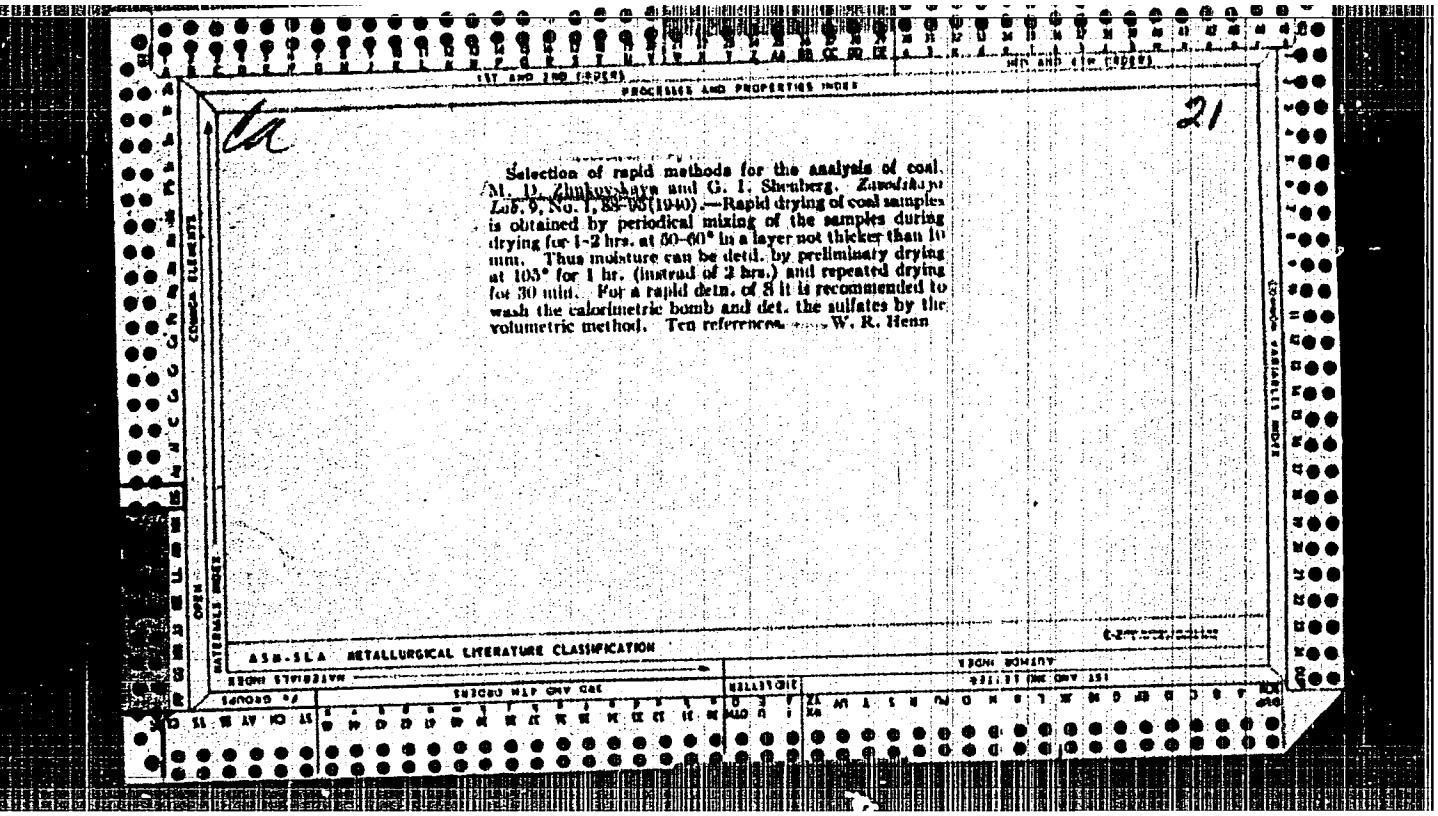


Determination of volatile matter in coke. A. P. Shakhno and M. D. Zilberg. Khimiya Tverdogo Topliva, Inst. (Trans. Thermo-Tech. Inst. Russia) 1930, No. 2, 17-20; cf. C. A. 24, 1721.—Results obtained by the use of elec., gas and elec. heating equipment are compared. A. A. Boriskovskii



Determination of volatile matter in coke. A. P. Shukhov and M. D. Zhukovskaya. *Zavodskaya Lab.* 4, 874-7(1935).--A comparative study of proposed methods for the detn. of volatile matter in coke with the use of European and American elec. and gas furnaces produced unsatisfactory results because of the excessive oxidation of coke. In all cases better results were obtained by heating a sample in an atm. of pure N_2. The best results were obtained by heating a sample in a Pt crucible with an alc. burner for 15 min. by conducting pure N_2 directly into the crucible. By this procedure the oxidation was reduced from 0.79-1.13% to 0.10-0.48%. Chas. Blanc





Selection of rapid methods for the analysis of coal. M. D. Zhukovskaya and G. I. Shtuberg. *Zavodskaya Lab.* 9, No. 1, 89–95(1940).—Rapid drying of coal samples is obtained by periodical mixing of the samples during drying for 1–2 hrs. at 50–60° in a layer not thicker than 10 mm. Thus moisture can be detd. by preliminary drying at 105° for 1 hr. (instead of 2 hrs.) and repeated drying for 30 min. For a rapid detn. of S it is recommended to wash the calorimetric bomb and det. the sulfates by the volumetric method. Ten references. W. R. Henn

ZHUKOVSKAYA, M. D. PA 18T19

USSR/Fuels, Solid Aug 1947
Hydrogen - Heating Effects

"New Method of Hydrogen Determination in Solid Fuels by Combustion in a Calorimetric Bomb," M. D. Zhukovskaya, Fuel Laboratory of the VTI, 5 pp

"Izvestiya VTI" No 8 (148)

Author discusses a new method for the determination of the hydrogen content of solid fuels. It is as accurate as Libikh's method. Mention is made of the ease with which the new method can be adopted by industrial laboratories.

18T19

USSR/Engineering - Heat, Petroleum Aug 52

"Determination of the Net Heating Value of Heavy Petroleum Products," M.D. Zhukovskaya, Cand Tech Sci, M. D. Kazakova, Engr, Fuel Lab

PA 233T34

"Tr V-S Teplotekh Inst" No 8, pp 24-27

Discusses detn of total heating value and suggests methods for obtaining data on H content required for calcn of net heating value. Method, previously developed for solid fuel and light petroleum products, includes combustion of specimen in calorimetric bomb and absorption of moisture by absorbent placed inside of bomb. This simple method, requiring no addnl equipment, takes about 2 hrs for detn.

233T34

ZHUKOVSKAYA, M. D.

233T34

L 3180-66 EPA(s)-2/EWT(m)/EWP(v)/T/EWP(t)/EWP(k)/EWP(b)/EWA(h)/EWA(c) IJP(c)
ACCESSION NR: AP5015547 JD/HM UR/0286/65/000/008/0086/0086

AUTHORS: Gubin, A. I.; Katsman, B. O.; Reznik, N. P.; Zhukovskaya, Ye. A.; Shitikova, V. I.

TITLE: A solder for soldering. Class 49, No. 170268

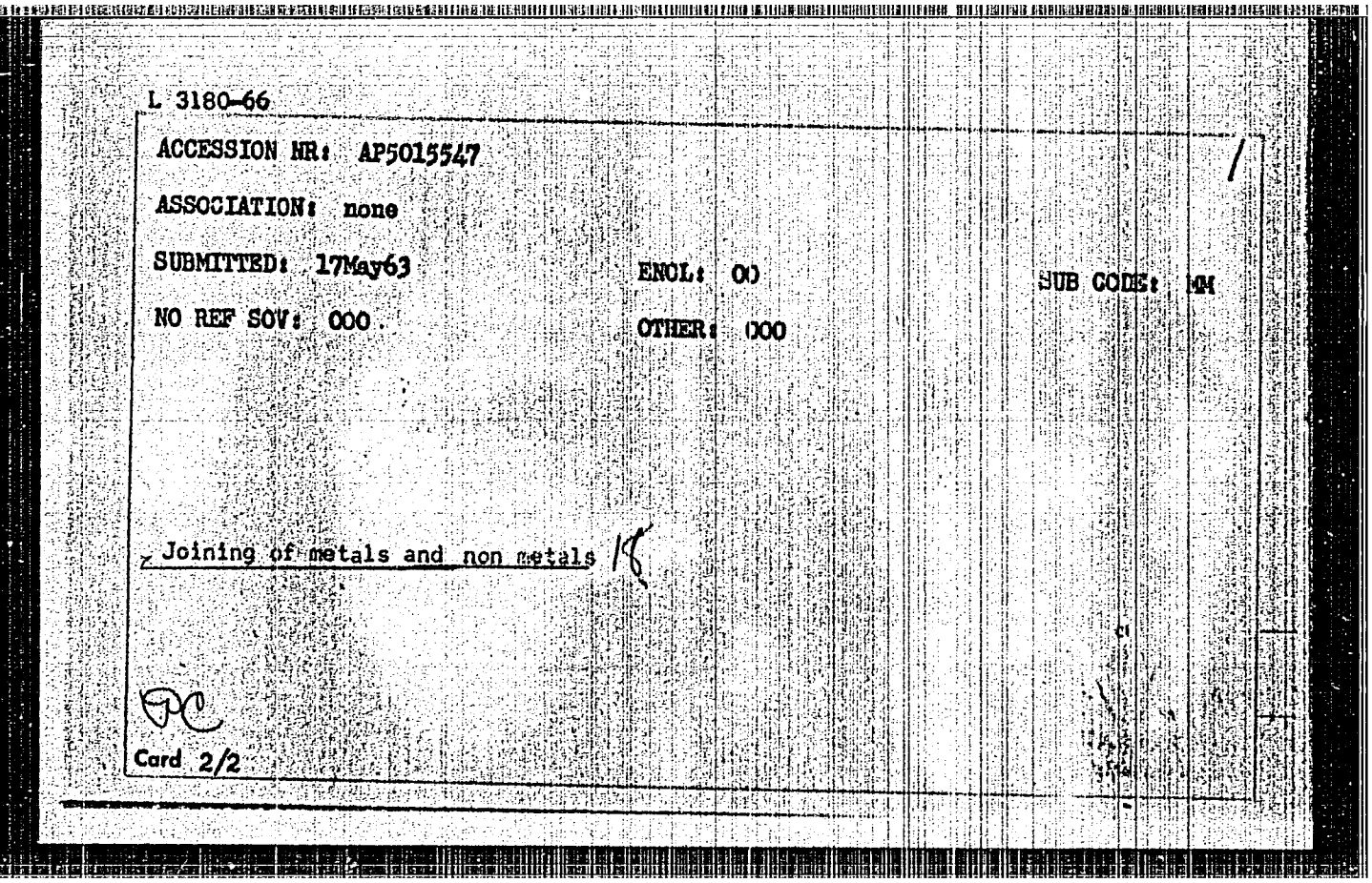
SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 8, 1965, 86

TOPIC TAGS: solder, soldering, silver, tin, copper, antimony, lead, phosphorus

ABSTRACT: This Author Certificate presents a solder for soldering electric conductors with silver-silicate strips, containing tin, lead, antimony, and copper. To diminish the dissolution of silver in the silver-silicate strips and to strengthen the connection, 5% of silver and 0.1% of phosphorus are introduced into the solder, while its other components are held at the following percent composition:

tin	40.0
copper	5.0
antimony	1.5
lead	remainder.

Card 1/2



L 3180-66

ACCESSION NR: AP5015547

ASSOCIATION: none

SUBMITTED: 17May63 ENCL: 00 SUB CODE: IM

NO REF SOV: 000 OTHER: 000

Joining of metals and non metals

Card 2/2

GUKASOVA, Yekaterina Aleksandrovna; ZHUKOVSKIY, Mikhail Isaakovich; ZAVADOVSKIY, Anatoliy Mikhaylovich; ZYSINA-MOLOZHEN, Larisa Mikhaylovna; SKNAR', Nikolay Akimovich; TYRYSHKIN, Vsevolod Georgiyevich; ZHUKOVSKIY, V.S., prof., doktor tekhn.nauk, red.; KUTATELADZE, S.S., prof., doktor tekhn.nauk, red.; ZHITNIKOVA, O.S., tekhn.red.

[Aerodynamic improvement of bladed apparatus of steam and gas turbines] Aerodinamicheskoe sovershenstvovanie lopatochnykh apparatov parovykh i gazovykh turbin. Pod red. V.S.Zhukovskogo i S.S.Kutateladze. Moskva, Gos.energ.izd-vo, 1960. 340 p. (MIRA 13:7)

(Steam turbines) (Gas turbines)

GORYUNOV, A.T.; ANDRIYEVSKAYA, A.F.; ZHUKOVSKAYA, M.K.; SMIRNOV, B.K., otv.red.; PEVZNER, A.S., zav.red.izd-va; OSENKO, L.M., tekhn.red.

[Uniform time and pay standards for construction, assembly, and repair operations in 1960] Edinye normy i rastsenki na stroitel'nye, montazhnye i remontno-stroitel'nye raboty, 1960 g. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam. Sbornik 20. [Construction and repair work] Remontno-stroitel'nye raboty. No.2. [Road construction] Dorozhnye raboty. 1960. 71 p. (MIRA 13:6)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam stroitel'stva. 2. TSentral'naya normativno-issledovatel'skaya stantsiya (TsNIS) Ministerstva avtomobil'nogo transporta i shosseynykh dorog RSFSR (for Andriyevskaya, Zhukovskaya).
(Wages) (Road construction)

ZHUKOVSKAYA, N.

ZHUKOVSKAYA, N.

Sensitivity, attention, individual approach. Prom.koop. no.8:20-21 Ag '57. (MLRA 10:9)

1. Zamestitel' predsedatelya pravleniya arteli invalidov "Trudovenik," Kursk.

(Cooperative societies) (Personnel management)

S/169/61/000/012/078/089
D228/D305

3.2410

AUTHOR: Zhukovskaya, N. A., and Ol', A. I.

TITLE: Change in the amplitude of the diurnal variation of the cosmic-ray intensity in relation to the magnetic activity

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 12, 1961, 10, abstract 12G57 (V sb. Variatsii kosmich. luchey i solnechn. korpuskulyarn. potoki. no. 2. M., AN SSSR, 1960, 101-104)

TEXT: The dependence of the amplitude of the diurnal variation of cosmic rays on the magnitude of K--the index of geomagnetic activity during the solar activity maximum (1957)--is established. The data were divided into 5 groups depending on the magnitude of the diurnal sum of the K-indices--ΣKp. It is shown that the amplitude of the diurnal variation increases

Card 1/2

Change in the amplitude...

S/169/61/000/012/078/089
D228/D305

with the growth of ΣKp to 19 - 23, and that it then sharply decreases at values of $\Sigma Kp = 24 \div 33$. A further increase in in the amplitude is observed at $\Sigma Kp = 34$. An analogous relationship is also detected for the period of the solar activity minimum (1954). Subsequent analysis disclosed that the mean-daily intensity values for days with $\Sigma Kp = 24 \div 33$ show no anomalous behavior. The possible causes of the detected effect are discussed. [Abstracter's note: Complete translation.]

Card 2/2

3,1800
3,2410

S/169/61/000/005/035/049
A005/A130

AUTHORS: Berdichevskaya, T.M., Zhukovskaya, N.A.

TITLE: On the existence of a stellar-diurnal variation of meson intensity in cosmic rays

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 5, 1961, 13, abstract 5 G 105. (Tr. Yakutskogo fil. AN SSSR, Ser. fiz., 1960, no. 3, 140-144)

TEXT: On the basis of data on intensity variations of the hard cosmic ray component that were obtained in Moscow, Yakutsk, Tikhaya Bay, Tokio and Freiburg, the authors investigated the presence of stellar-diurnal variation. In 1953 and 1955 the average monthly vectors of solar-diurnal variation corrected for the temperature effect evinced well expressed phase constancy. In 1954 the direction of the vector of solar-diurnal variation was shifted counterclockwise; at Tikhaya bay the phase change amounted to 180°. In contrast to this, it turned out that the phase of stellar-diurnal variation in 1954 was distinguished by high

Card 1/2

VB

constancy. These facts indicate that during a minimum of solar activity stellar-diurnal variation, the amplitude of which becomes comparable with that of solar-diurnal variation, has predominant importance. The authors emphasize the necessity of further study of the existence of stellar-diurnal variation by means of more extensive observation data.

N.K.

[Abstractor's note: Complete translation.]

37935

S/035/62/000/005/029/098
A055/A101

3.2410 (2205; 2805)

AUTHORS: Zhukovskaya, N. A., Ol', A. I.

TITLE: On the magnetic activity dependence of the change in the amplitude of diurnal variation in the cosmic rays intensity

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 5, 1962, 32, abstract 5A255 (V sb. "Variyatsii kosmichesk. luchey i solnechn. korpuskulyarn. potoki, no. 2", Moscow, AN SSSR, 1960, 101-104, English summary)

TEXT: The relationship is determined between the amplitude of the cosmic rays diurnal variation and the value of the K-index of the geomagnetic activity in the period of maximum solar activity (1957). The data were divided into 5 groups, depending on the value of the diurnal sum of K-indices ΣK_p. It was shown that the diurnal variation amplitude increases with the growth of ΣK_p up to 19 - 23, and then decreases sharply at $\Sigma K_p = 24 \div 33$. At $\Sigma K_p = 34$, a further amplitude increase is observed. An analogous dependence has also been found for the period of the solar activity minimum of 1954. Further analysis

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On the magnetic activity dependence ...

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revealed that the average diurnal intensity values for days with $\Sigma K_p = 24 \div 33$ do not present any anomalous behavior whatsoever. The possible causes of the revealed effect are discussed.

N. Kaminer

[Abstracter's note: Complete translation]

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YERMOL'YEVA, Z.V.; ZHUKOVSKAYA, N.A.; GOLOSOVA, T.V.

Experimental study of lysozyme and some data on its clinical use.
Trudy TSIU 68:136-139 '64.
(MIRA 18:5)

YERMOL'YEVA, Z.V.; GOLOSOVA, T.V.; VED'MINA, Ye.A.; SHENDEROVICH, V.A.; ZHUKOVSKAYA, N.A.

Use of lysozyme in curing carriers of pathogenic Staphylococci. Antibiotiki 7 no.4:359-361 Ap '62. (MIRA 15:3)

1. Kafedra mikrobiologii TSentral'nogo instituta usovershenstvovaniya vrachey.
(LYSOZYME)
(STAPHYLOCOCCAL DISEASE)

ZHUKOVSKAYA, N.A.

On the use of antibiotics in milk preservation. Antibiotiki 5 no. 5:101-104 S-O '60. (MIRA 13:10)

1. Kafedra mikrobiologii (zav. - chlen-korrespondent AMN SSSR prof. Z.V. Yermol'yeva) TSentral'nogo instituta usovershenstvovaniya vrachey.

(ANTIBIOTICS) (MILK--PRESERVATION)

BERDICHEVSKAYA, T.M.; ZHUKOVSKAYA, N.A.

On the existence of the sidereal variation in the meson intensity of cosmic rays. Trudy IAFAN SSSR. Ser. fiz. no.3:140-144 '60.
(MIRA 13:11)

(Cosmic rays) (Mesons)

YERMOL'YEVA, Z.V.; FURER, N.M.; RAVICH, I.V.; NAVASHIN, S.M.; ERAUDE, A.I.; FOMINA, I.P.; ZHUKOVSKAYA, N.A.; BALEZINA, T.I.; VED'MINA, Ye.A.; GOLOSOVA, T.V.; NEMIROVSKAYA, B.M.; TERENT'YEVA, T.G.

Experimental study and clinical use of lysozyme. Antibiotiki 8 no.1:39-45 Ja'63. (MIRA 16:6)
(LYSOZYME)

ZHUKOVSKAYA, N.A.

Stability of lysozyme titer in the blood serum of sick and healthy persons. Trudy TSIU 80:96-97 '65.
(MIRA 18:11)

ZHUKOVSKAYA, O. A. Cand Med Sci -- (diss) "On the problem of the effect of ascariasis upon the outbreak appearance and course of tuberculous meningitis in children." Chernovtsy, 1957. 16 pp (Min of Health UkSSR. Dnepropetrovsk State Med Inst), 200 copies (KL, 42-57, 94)

ZHUKOVSKAYA, O.I.

Treatment of dysentery with the preparation "OZCH." Zdrav. Turk. 4 no.6:27-29 N-D '60. (MIRA 14:1)

1. Glavnyy vrach Maryyskoy oblastnoy infektsionnoy bol'nitsy.
(DYSENTERY) (TEA--THERAPEUTIC USE)

IVASHUROVA, I.N.; ZHUKOVSKAYA, O.I.; YAKUBOVA, A.Kh.; KEBROVA, Ye.I.

Treatment of brucellosis with vaccine according to the method of G.P.Rudnev in combination with antibiotics. Zdrav. Turk. 7 no.6:31-36 Je '63. (MIRA 16:8)

1. Iz Turkmenskoy Respublikanskoy sanitarno-epidemiologicheskoy stantsii (glavnyy vrach V.I.Mamayeb) i Maryyskoy gorodskoy infektsionnoy bol'nitsy (glavnyy vrach O.I.Zhukovskaya).
(BRUCELLOSIS—PREVENTIVE INOCULATION) (ANTIBIOTICS)

ALEKSEYEV, A. G.; VERTSNER, V. N.; ZHUKOVSKAYA, O. V.: PODUSHKO, Ye. V.; TIKHOMIROV, G.P.

"The structure of some glasses of LiO_2-Al_2O_3-SiO_2-TiO_2 system and its variation in thermal treatment over the wide temperature range."

report submitted for 4th All-Union Conf on Structure of Glass, Leningrad, 16-21 Mar 64.

L 11869-66 EWT(m)/EWP(e)/EWP(b) GS/WH

ACC NR: AT6000503 SOURCE CODE: UR/0000/65/000/000/0351/0356

AUTHOR: Alekseyev, A. G.; Vertsner, V. N.; Zhukovskaya, O. V.; Podushko, Ye. V.; Tikhomirov, G. P.

ORG: None

TITLE: The changes in the properties and structure of Li_2O-Al_2O_3-SiO_2-TiO_2 glasses during heat treatment in a wide range of temperatures

SOURCE: Vsesoyuznoye soveshchaniye po stekloobraznomu sostoyaniyu, 4th, Leningrad, 1964. Stekloobraznoye sostoyaniye (Vitreous state); trudy soveshchaniya, Leningrad, Izd-vo Nauka, 1965, 351-356

TOPIC TAGS: lithium glass, silicate glass, aluminum silicate, solid solution, catalized crystallization, crystal

ABSTRACT: The properties and structure of lithia-aluminosilica glasses catalyzed by TiO_2 and treated within a wide range of temperatures have been investigated. Special attention was paid to glasses the composition of which was close to spodumene (SiO_2 - 60.5; Al_2O_3 - 28.0; Li_2O - 6.5; TiO_2 - 5.0 weight %). The results cover the dependence of the index of refraction and glass density on the duration of treatment, the comparative x-ray and infrared reflection spectra for glasses treated at different temperatures, and the dependence of the index of refraction and glass density on treatment temperature. Curves of the differential thermal analysis are also given. The results show that at temperatures of 700 to 800C the resulting crystals

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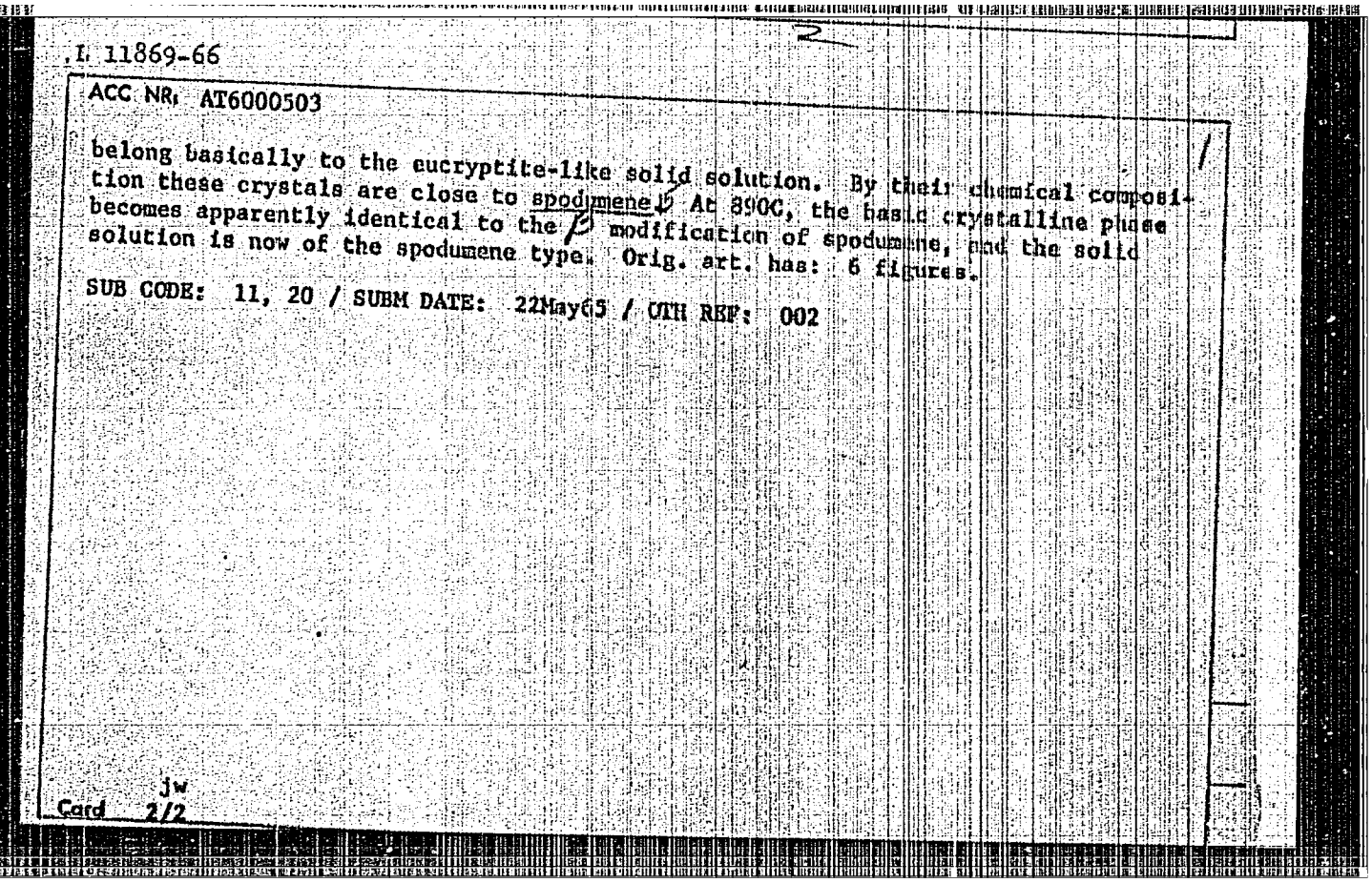

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ACC NR: AT6000503

belong basically to the eucryptite-like solid solution. By their chemical composition these crystals are close to spodumene. At 890C, the basic crystalline phase becomes apparently identical to the β modification of spodumene, and the solid solution is now of the spodumene type. Orig. art. has: 6 figures.

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